CHALLENGES TO DOMESTIC VIOLENCE DATA QUALITY IN SCIBRS

AUTHOR AND FUNDING

Alexandra Perez-Caballero of the South Carolina Law Enforcement Division (SLED) is grateful for funding received through the United States Department of Justice (DOJ), Office of Justice Programs (OJP), Bureau of Justice Statistics (BJS) Grant Number 2016-BJ-CX-K022. Any views expressed in this research—including those related to statistical, methodological, technical, or operational issues—are solely those of the author and do not necessarily reflect the official position or policies of the DOJ, OJP, BJS, or the South Carolina Statistical Analysis Center located in the South Carolina Department of Public Safety's Office of Highway Safety and Justice Programs.

INTRODUCTION

The Uniform Crime Reporting (UCR) Program is a national cooperative effort between federal, state, local, and tribal law enforcement agencies to collect a uniform set of crime data across all jurisdictions in the country. The National UCR Program is administered by the Federal Bureau of Investigation (FBI), with individual state-level programs primarily managing data collection within their states. South Carolina's UCR Program is managed by SLED.

The FBI collects crime data from states in two different formats: the older Summary Reporting System and the National Incident-Based Reporting System (NIBRS). After working closely with the FBI to develop and pilot NIBRS, South Carolina became the first state certified by the FBI to report using NIBRS in 1991, reporting all crime data to the FBI in the newer, more in-depth format. As the longest running NIBRS program in the country, the South Carolina Incident-Based Reporting System (SCIBRS) has a wealth of in-depth data available for study.

SCIBRS collects information on offenses, victims, offenders, and any property or arrests associated with every criminal incident known to law enforcement that occurs within a law enforcement agency's jurisdiction—61 different fields in total. Several of these fields are conditional, only allowing a value to be entered based on the values entered in related fields. Reporting agencies use records management system (RMS) software to create and maintain electronic reports of their incidents. When entering these incident reports, the reporting agency coder selects from a set list of values for each of the SCIBRS-collected fields, using standardized definitions set by SLED to ensure uniformity across jurisdictions. Once a month, reporting agency personnel use their RMS to compile a text-based submission file with all SCIBRS data points for every incident classified with a SCIBRS-reportable offense code entered, modified, or deleted in the previous month. The reporting agency then submits that file to the SCIBRS Unit at SLED via email, where it is processed and stored in the state repository.

Hundreds of validation rules ensure (1) the completeness of each incident with all required data fields, including conditional fields, and (2) the possibility of reported coding combinations. These rules are enforced at the local, state, and national level. An error message is generated at each level if an incident does not satisfy every validation rule. At the state and national levels, if an incident does not pass the validation check, the incident does not store in the relevant repository. The reporting agency must correct the incident and resubmit through the regular submission process for a rejected incident to store in the state and national repositories so that it can be counted in statistics.

In addition to these programmed quality checks conducted by RMS and repository software, the SCIBRS Unit at SLED conducts extensive quality assurance throughout the year, tracking missing data and prompting the reporting agency to review its crime totals and any unlikely or uncommon (but not impossible) coding combinations that are reported. The SCIBRS Unit also provides training lasting four hours to reporting agencies on request—teaching personnel proper coding techniques, as well as common errors and solutions. All Class 1 officers also receive an introductory class lasting one hour on SCIBRS as part of the Basic Law Enforcement program at the South Carolina Criminal Justice Academy (SCCJA), which is necessary for certification as a law enforcement officer in the state.

SCIBRS provides a rich and comprehensive data set for crime unmatched by any data collection system. While reporting agencies, SLED, and the FBI have many policies and procedures in place to maintain a high level of data quality and integrity, many challenges remain for data collection to be complete, timely, and accurate. Some of these challenges apply to the UCR Program as a whole, while others are specific to South Carolina, and yet others are relevant to only specific subsets of crime.

After the creation of the Governor's Task Force on Domestic Violence in 2015—largely spurred by releases of statistics based on UCR data indicating South Carolina as a top state in the country for the rate of women killed by men—the quality of domestic violence data collected through SCIBRS was identified as an area of concern. This report will describe possible challenges to complete, accurate, and timely reporting of domestic violence incidents through SCIBRS that could potentially act as foci for future data quality audits of domestic violence data. Those challenges include a lack of reporting of any crime data by reporting agencies, misclassification of offenses related to domestic violence, and the misclassification of relationship codes.

LACK OF SUBMISSION

There are over 280 law enforcement agencies in South Carolina that are responsible for reporting crime data through SCIBRS. Participation in SCIBRS—though required by state regulation (S.C. Code of Regulations 73-30)—is effectively voluntary. Even so, the participation rate of agencies has remained over 90% for several years. However, while the number of agencies reporting

partial or no data to SCIBRS remains small, they can still influence crime totals for the counties they serve.

There are several possible causes for an agency failing to send submissions to SCIBRS. Agencies are dependent upon their RMS software to report to SCIBRS. Without an RMS, agencies are incapable of reporting any data to SCIBRS. There are a few law enforcement agencies in the state that do not currently have an RMS, preventing their reporting to SCIBRS. Some of these agencies ensure the crime in their jurisdiction is still reported to SCIBRS by entering into an agreement with another agency—typically the sheriff's office—to cover their reporting responsibilities. Through these agreements, the covering agency reports all incidents that take place in the covered jurisdiction as their own. Not all agencies without an RMS have these agreements in place, however, and the crimes in their jurisdictions are unreported to SCIBRS.

If an agency does have RMS software in place, technical issues can prevent submission to SCIBRS. While these issues are typically resolved in only a few months, allowing the agencies to submit the missing submissions only a few months late, some issues are not so easily solved. If the technical issue is not resolved before the end of the next calendar year, SCIBRS can no longer process the late submissions, and the missing data will remain missing. Delays in resolving technical issues come about for many reasons, including contract disputes between the agency and their RMS vendor, lack of funding to pay for resolutions not covered in the maintenance contract (if a maintenance contract exists), and communication issues between the agency and their vendor.

Even with a fully functioning RMS, submission to SCIBRS still requires manual steps, leaving submission dependent on reporting agency personnel. A SCIBRS Point of Contact (POC) might occasionally believe the SCIBRS submission to be automatic, requiring no intervention, typically by confusing SCIBRS with the similarly named SCIEx system. SCIBRS POCs also typically have many duties at their agencies, which can cause them to fall behind in their SCIBRS responsibilities or to de-prioritize them altogether.

Law enforcement agencies in general—and their records departments in particular—suffer from a high rate of turnover across the state. This can leave a new SCIBRS POC at a reporting agency without direction on creating and submitting monthly submissions using their RMS. They might not even know that a SCIBRS submission is necessary. The SLED SCIBRS Unit typically only discovers the personnel change during quality assurance when several months of submissions are noted missing from the agency or emails fail to deliver to the previous POC. This prompts a concentrated effort to contact the agency and track down someone in the reporting agency's records department to replace the previous POC. The SCIBRS Unit can then provide the new POC with the guidance and training they need to properly submit to SCIBRS. Until then, however, the agency's SCIBRS data may not be submitted properly or on time.

No matter the reason for an agency to miss submissions to SCIBRS, the result is missing crime data for the jurisdiction, its county, and the state. This affects the accurate reporting of all crimes, including domestic violence data, and proves a challenge to assessing the state of domestic violence in South Carolina.

MISCLASSIFICATION OF OFFENSES

SCIBRS does not have a single value or field to indicate that an incident is related to domestic violence. To compile domestic violence statistics, incidents can be restricted based on values entered in two fields: SCIBRS Offense Code and Victim-to-Offender Relationship. Reporting agency coders use definitions established by the FBI UCR and SLED SCIBRS to choose the values entered into the SCIBRS Offense Code field. These definitions are not based on state statute and are not related to what, if anything, the offender is charged with. Instead, the reporting agency coder uses the SCIBRS Offense Code to describe what they believe to have occurred as a result of the investigation (as opposed to what they can prove in a court of law). This allows the domestic violence statistics produced using SCIBRS data to include many more incidents than any review of arrest or criminal history records.

While the data can be aggregated in different ways depending on the requestor's need, typically, domestic violence statistics are restricted to victims connected to a SCIBRS Offense Code of Murder/Nonnegligent Manslaughter, Rape, Sodomy, Sexual Assault with an Object, Robbery, and Aggravated Assault. These offenses have been designated by the FBI to be indicators of violent crime as a whole and are generally labeled as the Violent Crime Index. However, there are other violent crimes collected by SCIBRS, and a simple misclassification of offenses within that broader category of violent crimes can lead to inaccurate crime statistics.

In SCIBRS, an Aggravated Assault is a physical attack upon another in which either a serious weapon was used or displayed threateningly or the victim sustained a major injury. If no serious weapon was used or displayed threateningly and the victim sustained only a minor injury or no injury at all, the incident must be classified as a Simple Assault instead. Any other mitigating or aggravating factors are not considered in a SCIBRS classification of assaults. However, those other factors do play a role in deciding how to charge a subject and are typically in the minds of the officers who write and often code the incident reports from which SCIBRS gathers data. This often leads to misclassifications between the two assault codes, which affects domestic violence statistics. An agency that commonly misclassifies incidents that should be Aggravated Assaults as Simple Assaults will have a lower rate of domestic violence reported to SCIBRS than the data should reflect. Similarly, an agency that commonly misclassifies incidents that should be Simple Assaults as Aggravated Assaults will have an inflated rate of domestic violence.

Confusion between these two offenses has been widespread enough that it is a strong focus in both the four-hour SCIBRS Training Class and the one-hour Basic Law Enforcement Class at the SCCJA. During regular quality assurance, the SLED SCIBRS Unit also looks at the Type of

Weapon/Force Used and the Victim Injury fields to find coding combinations that indicate a possible offense misclassification. The SLED SCIBRS Unit sends the list of potentially misclassified incidents to the reporting agency for review with explanations why they might be miscoded, along with instructions on how to correct the incidents. Even so, it is incumbent upon the reporting agency to review the incidents, make the corrections, and successfully resubmit the updated incidents.

Reporting agency coders can also misclassify offenses by using classification shortcuts, usually by reporting the SCIBRS Offense Code that is named most similarly to the offense the subject is charged with. While this can also lead to mistakes between Aggravated and Simple Assaults, it can also lead to overreporting of Disorderly Conduct, a lower-level Group B offense in SCIBRS. As a Group B offense, only information on the arrestee is submitted to SCIBRS, meaning if no arrest is made, then no information is sent to SCIBRS. Because relationship information is sent with the victim information, and that victim information is not sent to SCIBRS for Group B offenses, there is no way to include Disorderly Conduct offenses in domestic violence statistics.

Statute mapping is another offense classification shortcut that leads to misreporting of domestic violence statistics. Some state UCR Programs map state statutes to UCR offense codes, allowing RMS software to prompt the coder to enter the statute violation the subject is charged with and to present a short list of possible UCR offense codes for the coder to choose from. Unfortunately, while making classification easier on coders, the quality of data from these kinds of systems suffers; because of that concern, statute mapping has never been permitted for any agency reporting to SCIBRS. As mentioned earlier, SCIBRS requires that agencies classify offenses based on what law enforcement reasonably believes to have occurred based on investigation, which is a much lower threshold of proof than that required by a court of law. This allows SCIBRS to collect different information from the criminal history repository, which does collect the statute violation the offender is charged with. Statute mapping draws a false equivalency between arrest charges and the SCIBRS Offense Code, compromising the quality of statistics compiled using SCIBRS data.

Because statute mapping is permitted in other states, however, some RMS vendors offer mapping to their clients in South Carolina as a selling point. Even though this feature is prohibited, some agencies still use statue mapping. In these cases, the mapping of South Carolina statutes to SCIBRS Offense Codes is not completed by state-level UCR and legal personnel conducting several months to a year of legal analysis and discussion—as is typical in states that do allow statute mapping. Instead, the mapping is decided by a small group of analysts at either the RMS vendor or the reporting agency in addition to their regular duties. Mistakes are often made in this rushed process, leading to egregious errors in mapping, such as having every Failure to Pay a Toll Booth statute violation classified as Murder/Nonnegligent Manslaughter in the SCIBRS Offense Code. The statutes are typically mapped to only one SCIBRS Offense Code, automatically inputting that one value instead of presenting the coder with a list of possible choices. This can lead to mistaken classifications with immense effect for the agency's SCIBRS

reporting, from having every Criminal Domestic Violence statute programed to automatically report an Aggravated Assault to SCIBRS to having all Assault and Battery charges mapped to Simple Assault—causing overreporting and underreporting, respectively, of domestic violence incidents to SCIBRS.

MISCLASSIFICATION OF RELATIONSHIPS

In addition to typically restricting domestic violence statistics to include incidents with only Violent Crime Index offenses, these incidents are further restricted to count only those with a victim that has an intimate relationship with at least one of the offenders reported in the Victim-to-Offender Relationship field. Relationship codes are grouped into broad categories: Intimate, Familial, Otherwise Known, and Not Known. Any person reported in the incident to be a victim of a Crime Against Person offense or Robbery must have their relationship to every offender in the incident reported, up to the 10 most-closely-related offenders.

There are currently 29 different types of relationships that can be reported to SCIBRS. The Intimate group of relationships contains Spouse, Ex-Spouse, Common-Law Spouse, Boyfriend/Girlfriend, Same-Sex Relationship (as of January 2017 same-sex relationships can be reported under the same relationship values as opposite-sex relationships), Cohabitant, Excohabitant, and Child in Common (the latter three were added in January 2017 at the recommendation of the 2015 Governor's Task Force on Domestic Violence, with these categories previously being subsumed under the Boyfriend/Girlfriend value).

Incident reports are typically written by the responding officer shortly after the initial response to the scene. SCIBRS fields, including the Victim-to-Offender Relationship, are usually classified at this time based on the initial information. If the agency investigates further, updates are added to the case file—most often in the form of a supplemental report. When adding supplemental reports to the case file, reporting agency coders must remember to update the SCIBRS-reportable fields for the case; simply stating updated information in supplemental narratives will not convey updates to SCIBRS.

With domestic violence cases in particular—in which the victim may not be cooperative or the victim and offender's relationship may not be immediately clear—responding officers may use relationship values that most closely resemble what they do know about the relationship. Some possible placeholder values could be Relationship Unknown, Acquaintance, or Otherwise Known. While this is the correct practice, the agency must also update the relationship value as the investigation continues if they find that the relationship is different from initial reporting. It is possible that reporting agencies are correctly using one of the possible placeholder values to describe the relationship as best they can at initial contact, but it could be the case that the Victim-to-Offender Relationship field is not updated to notify SCIBRS after further investigation finds that the victim and offender had an intimate relationship. This might even occur despite the update being included in a supplemental narrative. If these updates to the Victim-to-Offender

Relationship field are not forwarded to SCIBRS, the incidents are not included in SCIBRS domestic violence statistics, resulting in an agency underreporting domestic violence in their jurisdiction.

CONCLUSION

While the current training and data quality processes can identify and resolve many of the most common challenges to domestic violence data quality, participation by reporting agencies in these processes is voluntary. SLED SCIBRS has a full-time trainer who can meet the needs of any size agency in the state, but the agencies must request the class and send the appropriate personnel to attend. Quality assurance is conducted at least three times a year during which each agency is sent their crime totals and lists of incidents with questionable coding combinations to review and correct if necessary. The agencies have to dedicate the time and resources to compare data already sent to SLED with their local reports and resolve any discrepancies they discover by submitting corrections to SLED. Due to the amount of time necessary to participate in training and quality assurance, agencies may be unable to—or may choose not to—devote personnel and time to these processes.

SLED SCIBRS currently does not have any processes in place to assess the effectiveness of current training and quality assurance procedures in improving data quality. A records audit could fill this gap. SLED SCIBRS personnel would select a sample of incident reports already submitted by the agency and request the full incident reports with narratives, supplementals, and booking reports to review. SLED SCIBRS would then be able to determine which fields in those incident reports were classified incorrectly, and provide training as necessary to address issues common across that specific agency. Participation in the records audit would be required for all reporting agencies, allowing SLED SCIBRS to evaluate the agency data quality after quality assurance has been conducted.

Even with full participation from reporting agencies in training, quality assurance, and records audits, the underreporting or overreporting of crime, especially particular subsets of crime, is still difficult to detect, especially if the misreporting is chronic within the agency. Reviewing crime totals during quality assurance discovers only changes in reporting over time, but if agencies persistently misclassify incidents, there will be no change in crime totals to prompt a closer review by either SLED SCIBRS or the reporting agency. While records audits can uncover some misclassifications, the limited number of incident reports the SLED SCIBRS Unit can review makes it difficult to discern patterns in misclassifications for anything but the most frequently-reported types of crime. Additionally, incidents that the reporting agency classifies as not reportable to SCIBRS will not be included in the records audit, making it impossible to assess whether all criminal incidents are reported to SCIBRS.